

## PRELINARY REPORT

**Public Debt Geography**

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**ABSTRACT** – *This article provides a macroeconomic analysis of public debt burden in the major economic regions, each region is considered from the standpoint of public debt and its ratio to key macroeconomic indicators, describing the current state of public debt and the prospects of fiscal policy in selected regions.*

**KEY WORDS:** *public debt management, exchange rate, debt burden, external and domestic public debt, total debt, debt sustainability*

**Introduction**

Up to date, the level of borrowing in many countries is close to its bottom line, which was caused by the influence and aggravated by the economic crisis of 2008-2009 and became the trigger for the so-called "Second Wave" of the crisis. The key feature of this new crisis is the situation where all the borrowing countries are developed ones like the U.S., the EU states, Japan and so on are problematic. Thus, to make a logical assumption that in the event of defaulting on government bonds the world's largest economies (even partial) will be triggered by an even deeper downturn in the global economy, which could lead to a prolonged recession and a repetition of the Great Depression of the 30-ies of 20th century. The same course of events can drastically change the balance of powers, both on the economic map of the World, and at the political stage.

The key question that arises today is whether it is reasonable shape the budget deficit by deficit spending? Either should the budget be balanced each year? In any case, in order to carry out its functions fully, including the state must cope with the different variations that are the subject to a market economy and to conduct so-called countercyclical fiscal policy, in which the federal budget is matched with deficit during recessions and has a surplus in periods downfalls. This rightly suggests that the use of active fiscal policy is unlikely to provide a balanced budget in any given year.

The key problem of the budget concept is that the ups and downs in the economic cycle may vary in depth and duration, and therefore, the task of stabilization is in conflict with the task of balancing the budget during the cycle. For example, a long and deep recession, followed by a brief period of prosperity and modest, would mean a large deficit during the recession, the little or no surplus at all for the period of prosperity and, therefore, cyclical deficit. And today the theory, written more than 50 years ago has suddenly become a reality.

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The world was in a situation where economic cycles coincide in such a way that many states were not prepared for such a severe slowdown in economic growth. In addition, if during the Great Depression, the world has never been so globalized, but now the crisis is literally exported to the dollar and the euro in almost all parts of the world and this is happening due to "mutual responsibility", a situation in which all owe everything.

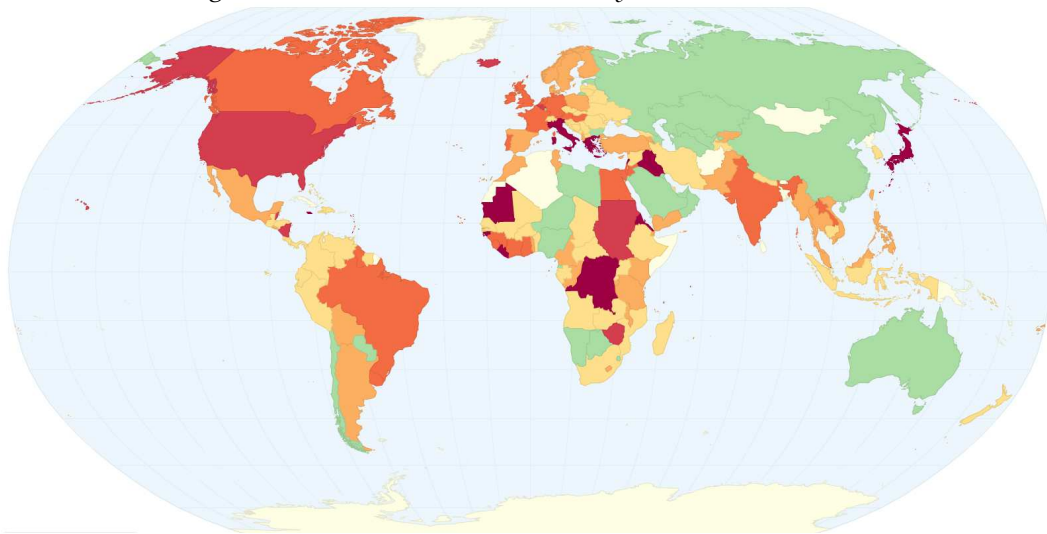
At present, the developed and developing countries regardless of which group of countries they belong to, carry out the policy of government loans to domestic and foreign financial markets. And almost every country is a borrower or a member of the international financial organizations, whose loans actually provide the resources to countries with a developed, developing and transition economies.

Debt, Fiscal and monetary policy of the state are inextricably linked, currency, inflation rate, the refinancing rate, the increase in government borrowing led to a reduction of investment resources in the economy, disruption of reproduction processes, reducing economic growth. Sooner or later, borrowing beyond the state capacity that calls for cuts in social, investment and other purposes that are not related to the repayment and servicing of the debt.

Up to date, the total public debt has exceeded \$ 40 trillion., which is 68% of world GDP. To fight the crisis and its consequences, most governments were forced to spend considerable sums of money, which eventually turned into the catastrophic growth of public debt, which led to a paradoxical situation - today the most over credited countries in the world today turn out to be developed countries – such as the U.S., Japan, Canada and the States Euro area.

Thus, in the context of the global economic crisis, the problem of public debt management has acquired a special significance. At this stage there is an objective that needs development and implementation of a qualitatively new debt strategy throughout the global financial system.

*Figure 1. Public debt to GDP ratio by countries, % (2011)*



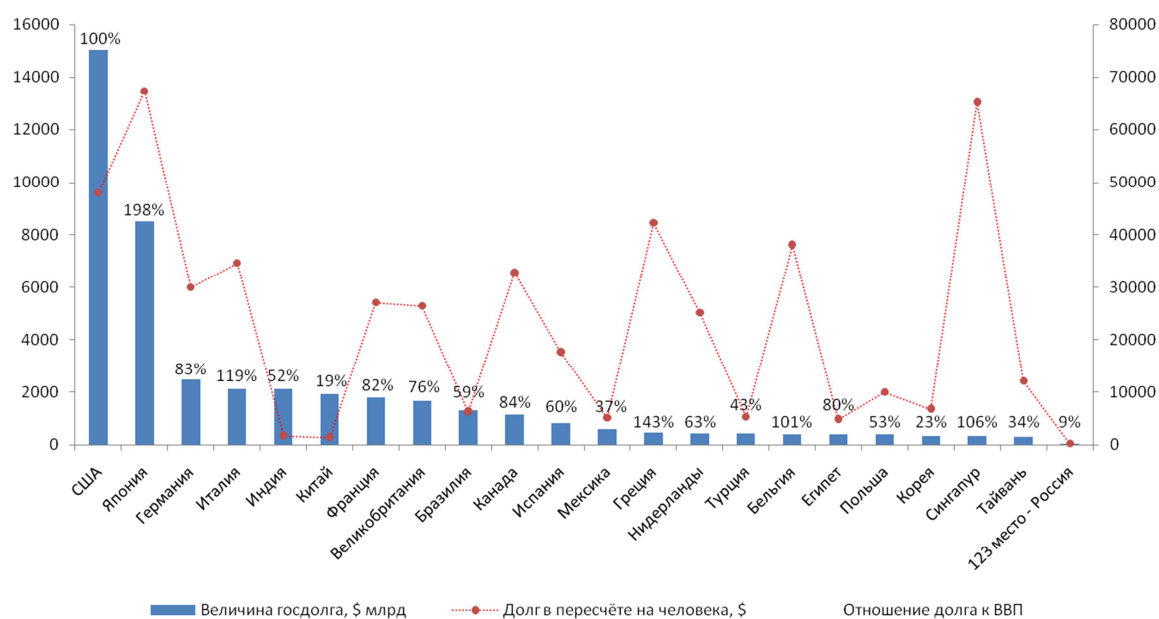
Source: compiled by the author using the tools on the site based on statistical data <http://chartsbin.com>  
[www.imf.org](http://www.imf.org)



In our opinion, one of the most significant criteria for assessing the level of public debt is the ratio of gross government debt to GDP. The level of debt in different countries varies considerably, and therefore the distribution of debt burden today is extremely uneven. However, according to our viewpoint, the geography of debt has certain patterns that we will try to identify.

It is obvious that among the countries that being ranked as the advanced economy countries, the vast majority is in the red zone, those are the whole of North America, Western Europe, Israel, Japan. Among the BRIC countries the situation is less straightforward - Russia and China are saddled with virtually no debt, because these countries have one of the highest gold reserves. On the other hand, Brazil (as well as the rest of Latin America, including the second-largest economy, Argentina of the mainland) and India (as well as all the countries of SAARC and ASEAN) has a high ratio of public debt to GDP, and are at risk, although less than, for example, developed countries because, in our opinion, the economy of the BRIC countries enables a more flexible approach to monetary policy, which we shall mention later.

Figure 2. The value of debt Top-20 + the Russian Federation (\$ billion) in debt per person (\$ / capita), the ratio of government debt to GDP ratio, % (2011)



Source: Compiled by author based on data from [www.imf.org](http://www.imf.org), <http://treasurydirect.org>, <http://cia.org>, <http://minfin.ru>

In absolute terms, an undisputed leader with the largest public debt are the United States. In 2011, the debt ratio to GDP in the world's largest economy has exceeded 100%, while the burden on everyone in the country increased almost up to \$ 50,000, which is a very worrying sign. The second place belongs to the third world economy - Japan. Considering relative terms the ratio has reached 200%.



The following countries are the European giants such as Germany and Italy, a little further are France, Britain and Spain. All the major economies of the Old World are considerably burdened with debts. India and China are also among the first on the level of public debt in absolute terms, but due to the scale, both the country and the economy this figure is smoothed (in the case of China - till 19%, India is saddled with more debt assuming relative size of its economy and this index already accounts to 52%). Russia, thanks to action taken in the 2000s., Today holds 123th place with 9% of public debt to GDP ratio and the absolute value of government debt does not exceed \$ 36 billion.

Such a situation eventually had led to the fact that the world's rating agencies such as Fitch and Moody's had decided to lower the credit rating for developed countries. Since the ratings had already been reduced for Spain, Belgium and Italy. Rating of Greece due to risk of defaulting on sovereign bonds in the event of failure to provide assistance from the IMF and the European Mutual Fund downgraded to "junk level" Ca. In mid-February of 2012 the Parliament of Greece has finally adapted a program of spending austerity, both the European Fund of Stability and the European Central Bank made the first payment into the state budget in order to avoid technical default announcement on government bonds. In addition the investors, who had these bonds were made an offer of a "reassessment" of their securities with their subsequent partial redemption, as even with the powerful support of the largest countries in the European Union Greece is not able to pay all its obligations.

The main thing is that the ratings of the largest and historically the most stable economies in late 2011 were also put to a review. Thus, the credit rating of the U.S., Germany, France, the UK could be reduced from the highest investment-grade Aaa. A rating of Italy, Spain and many countries of Eastern Europe can fall down by one grade to A1 or A2. Absolutely similar actions are taken in this by other major rating agencies such as Fitch, S & P and Dagong.

Thus, the credit risks have increased significantly, especially in developed countries, with the result that gives a kind of chain reaction in the entire world economy. Since we were able to identify some regional and geographical relationship in economic integration, we will consider the situation with public debt in each region separately, grouped as follows:

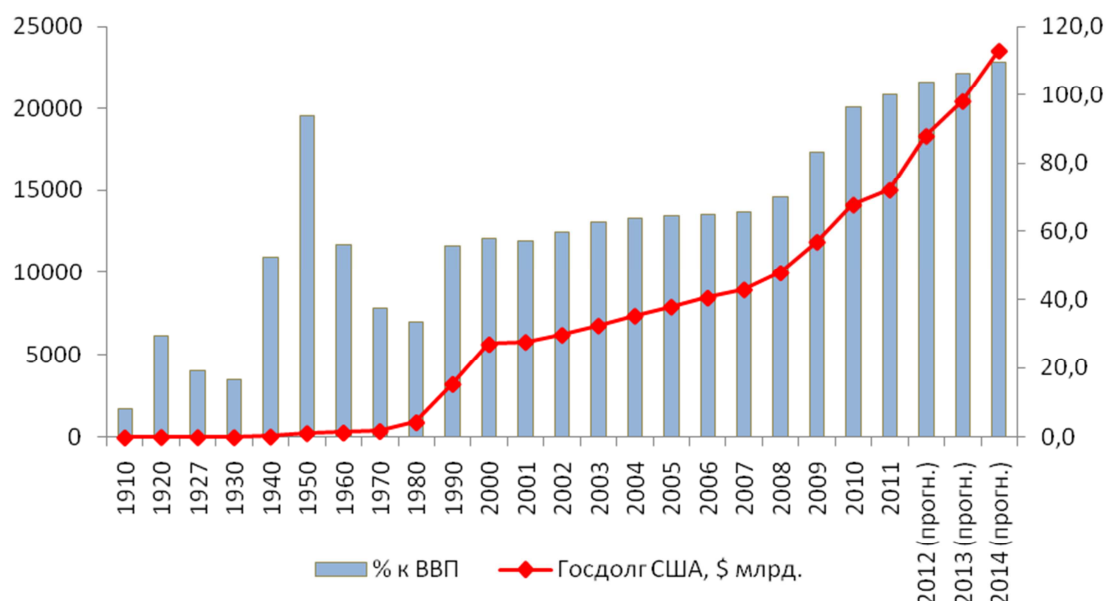
1. NAFTA, including USA;
2. European Union countries;
3. China;
4. Japan;
5. SAARC, including India and ASEAN;
6. MERCOSUR and including Brazil and Argentina;

## **The United States and NAFTA**

As of November 17th 2011, total U.S. national debt amounted to \$15.034 trillion. Thus public debt reached 100% of U.S. GDP.



Figure 3. The U.S. public debt dynamics and debt to GDP ratio



Source: Compiled by author based on data from "The Historical Tables: Budget of the U.S. Government – Fiscal Year 2011"

Historically, the budget expenditures of the United States exceed the revenues from the late 60s of the XX century (in 1970 U.S. budget surplus was recorded only four times - in 1998-2001.). The national debt peaked at a ratio of GDP in 1946 due to the increased government spending significantly on defense, financed by the bonds, reaching 121.2% of GDP. The rapid growth of the U.S. economy (and, as a consequence, GDP) between 1965 and 1985 has reduced this value down to c.a. 40%.

However, since the 1990s. public debt in the U.S. began to grow steadily. Until the crisis of 2008-2009 (which began with the subprime mortgage crisis in the U.S.) increasing government spending, in fact, was compensated by rapid economic growth, while politicians and economists have been "distracted" by other problems. However, with a slowdown of the economy in the crisis and a sharp increase of government spending, the national debt has started to increase by 15-20% per annum. Thus, in August 2011 the government had to increase the debt ceiling up to \$ 15 trillion and the ratio of debt to GDP ratio reached 100%.

At the same time the U.S. economy is the most important piece of a great mosaic called the World economy: first, the largest center of consumption, and secondly, the U.S. dollar is the world's reserve currency and the major means of payment for oil exporters, and third, the government bonds of the U.S. Treasury (treasuries) considered as the benchmark treasury bonds, and reliability are the most popular means of storing capital. Historically, many investors are willing to invest their money in the U.S. Treasuries, even knowing that the rate of return on these securities may be lower than the inflation!

Largest holders of the U.S. Treasury securities are Japan and China. In case of technical default on the U.S. government bonds, these countries will suffer first. And they are the largest providers of products on the market, both the U.S. worldwide. That will start a chain reaction that would provoke an unprecedented decline in consumption and production,



respectively. Following the U.S. dollar (in case of a default rate will fall a lot) will fall pound sterling as well, as the UK economy also depends heavily on the U.S. market. It will bring enormous consequences to the OPEC countries - the fourth U.S. lender. The price of oil in this case may decline significantly, which negatively affects all economies dependent on exports of raw materials, including Russia.

With the default of the U.S. (which, as shown by the political events of the summer 2011 are more real than it might have seemed), the consequences can be enormous over the world. Reserves in most countries will suffer huge losses, living standards will plummet in the U.S., consumption will be reduced, which in turn will degrade the production around the world. As a result the financial system will receive a great shock and the world will be for many years plunged into recession.

Not surprisingly, most experts tend to see the main threat to the world economy in the U.S. and more specifically - in excessive public debt that was dramatically accelerated because of the crisis.

Thus there are still no any significant measures to reduce the level of debt are taken. The White House is aware of a problem for a long time, but the debate continues, there are a lot of populist statements, but still no real and acceptable solution is found. The approved plan to reduce the budget deficit at \$ 2.4 trillion over the next 10 years does not hold water - even in this case, the public debt of the country will rise to 150% of GDP by 2020.

The U.S. neighbors' public debt exceeds the "safe" level as well. Canada and Mexico were in a similar situation when, during a financial crisis, these countries were forced to loan a lot to support their banking systems and stimulate the economy as a whole. The situation in these countries is less critical, but in case of aggravation of the situation in the U.S. Canada and Mexico are to suffer from it more than anyone else, because NAFTA is historically oriented on the consumer market of the United States.

## **The European Union countries**

There are problems with critically high level of public debt not only in the U.S. - the real debt crisis unfolded in a different financial center, emitting the second World reserve currency: the euro area. The last economic crisis has revealed serious imbalances in the fiscal policy in Greece, where public debt reached 160% of GDP. Stability of the common European currency was put in jeopardy.

The decision to provide Anthems with the financial assistance amounting to hundreds of billions of Euros was taken, but this problem has much larger borders: the same problems occurred in Ireland, Spain and Portugal. At the end of 2011, beginning of 2012 the situation became even more acute: there is a risk of escalation of debt crisis on one of the largest economies in the EU - Italy, whose debt (almost \$ 2 trillion Euro) exceeds the aggregate amount of debts of all mentioned above countries.

The budget deficit of all the "problematic" countries since their accession to the EU and the euro area exceeded the maximum allowable level of 3%. During the crisis, deficit has been significantly increased and in some cases exceeded 15%. This is a disastrous impact on the level of public debt in these countries. The problem for small economies of the euro area is also the inability to print currency that could be used at least to nominally cover the debt.





Monetary union in the presence of advantages and has an obvious drawback - the inability to implement a flexible fiscal policy. That is why the small euro area economy in the future will be even more dependent on Germany and France.

The leading EU countries such as Germany and France do not extend beyond the established norm of 3%. However, Italy and Spain are experiencing significant difficulties in retaining this strip. That's why the most severe austerity measures introduced today in the "southern" European countries. It can be assumed that this situation will eventually lead to the fact that the position of Germany and France will intensify following the debt crisis, while other EU countries, which have been prepared for the crisis to a lesser extent, may lose much of their "economic freedom".

An interesting fact is that the biggest debt in Europe is in Germany - over 2 trillion Euros. However, thanks to a powerful economy on the one hand and effective fiscal policy and budget discipline on another, Germany has a rate of debt to GDP ratio of 83% and this level is stable.

The second-largest debt in Italy (nearly \$ 2 trillion Euros), but due to the fact that its economy is much weaker than that of Germany, and fiscal discipline suffers a lot, Italy was recently ranked among the "problem countries" as well. It is obvious that the European Stability Fund won't be able to cover the Italian debt, so the country is considered as one of the main risk foci for the euro area.

France on its debt and fiscal policy is very similar to Germany and, in fact Sarkozy and Angela Merkel have created a tandem, which promotes the idea of further integration of the European Union, but under the auspices of the leading and most stable economies in Europe, ie Germany and France. Perhaps in the history of the world, Germany and France for the first time created a real union. However, with the election of new president of France, no one else has certainty that this tandem will continue to exist in its present form. After all, if the views of Nicolas Sarkozy and Angela Merkel in the regulation of debt were matching - reducing government spending and stimulate production, Francois Hollande is a pronounced advocate of socialist and stimulate demand by increasing government spending. Thus raises the question of whether two European politics finding a common approach to European debt problems.

Spain is still able to service its debt, but the pace of debt growth is very high. In addition, the situation in Spain is complicated by the highest unemployment rate in Europe. Hence, a simple conclusion - if no one works, there will be no money earned by the country.

There are so called "problematic states": Greece, Portugal, Ireland. In all these countries, the ratio of debt to GDP exceeds 100%, and fiscal discipline to date is regularly violated. Governments of these countries are taking the most severe austerity measures, hurting a lot any social activities and programs and causing unrest among citizens.

According to statements of more successful neighbors in the European Union there is no other choice for them, but to cut expenses and as a result decrease their living standards. But it would be a fair question, who led Greece, Portugal and Ireland to the situation where they are today? On the one hand, of course, it is the fault of the governments of these countries, which cannot withstand the necessary fiscal discipline and year after year increased government spending. On the other hand, is it German, French, Italian banks have not seen what was happening with fiscal discipline of these countries with dramatically increase in

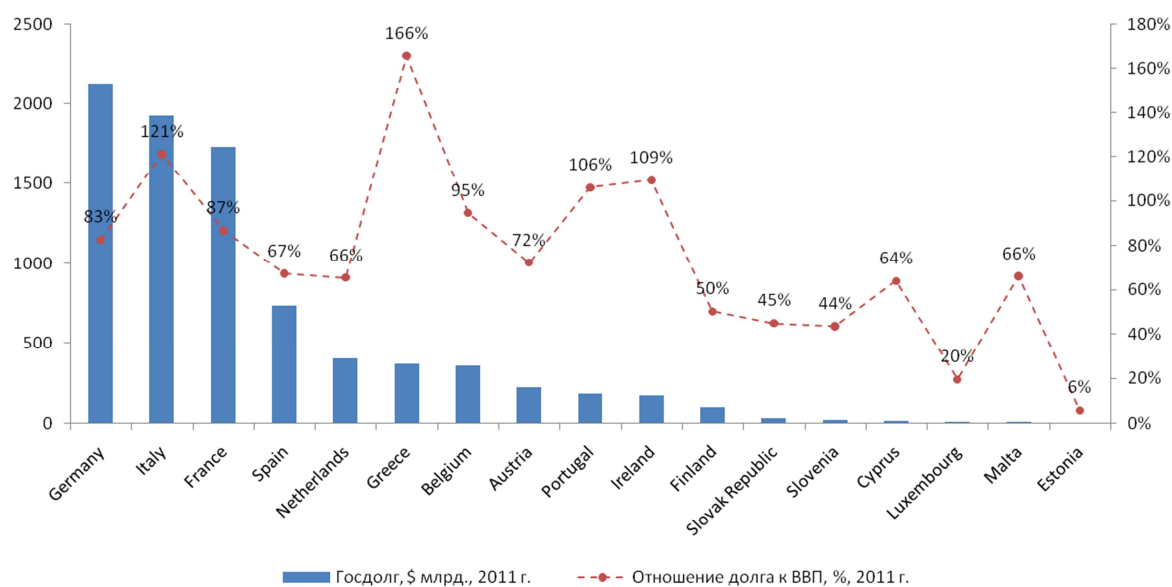
government spending and growing debt? A few years ago it was already clear that the small European economies will be unable to pay its obligations.

It is reasonable to assume that this was done with a reason. After all economic leverages has been historically one of the most effective tools of political influence. Thus, we see that the current debt crisis is not a naive mistake of economists not keeping track for the budget deficit, but the prudent politicians using the most effective weapon of XXI century – the debt.

Moreover, such a radical reduction in government spending would inevitably result in a reduction of income, it entails a narrowing of the demand, which leads to contraction of the economy and ultimately exacerbate these problems. Therefore any nation can be put on its knees. It is a fact that Greece is the cradle of European civilization and there is something symbolic in the fact that the European civilization may begin its decline there as well.

As noted above, there is a problem of high unemployment rate in Europe. It should be noted that very high levels of unemployment are in Spain (above 20%), Italy (close to 10%), Portugal (10.5%), Ireland (13.2%), Greece (10.2%). Best results are showing all northern European countries: Germany, Austria, Great Britain and the Benelux.

Figure 4. Euro area public debt volumes and debt to GDP ratio



Source: Compiled by author based on data from <http://imf.org>

In this case, there is a correlation not only with the level of public debt, but to the level of fiscal deficit - the more people work, the better the economy works, the more taxes the state collects. This is a very simple conclusion, but quite reasonable and actual especially in modern Europe - people want to work less and live better.

Summing up European debt problems we should note that with the current "weak" and inactive policy of European officials the debt problems of the Old World may get worse. It is vital to tighten fiscal discipline, cut government spending and, as banal as it may sound, to work more. For now real problems are yet experienced by small states of Europe. If,





however, along with Greece and other "problematic" countries there will be Italy – the third euro zone economy – such a burden will become unbearable for the EU stability fund. Default in at least one of the mentioned countries could cause a chain reaction throughout the euro area, destroying it which would entail a strong currency and the economic shock to the world.

## **People's Republic of China**

Paradoxically, another threat to the global economy lies in China, despite the fact that the level of public debt remains at quite a reasonable level of \$ 428.4Bn for such a huge Economy, and the ratio of government debt to GDP ratio of is 35% only.

During the global recession in 2008 China could hardly lose its GDP growth rate. Stable yuan and competent crisis management policy aimed at stimulating domestic consumption, provided Beijing more than a comfortable economic growth of 8-10% even in the hardest times. However, the trade imbalances (historically China exports much more than imports) and the Chinese economy overheating are concerning experts lately even more.

Unlike Europe, the U.S. and other developed countries China is not experiencing serious problems with public debt. The danger lies precisely in the excessive growth of the economy. The growth of welfare increases consumption and therefore increases inflation. In addition, distending "bubbles" in real estate and capital markets driving the government in a direction where it is becoming more difficult to control this process. The collapse of these bubbles could become a real threat to the global economy, causing billions in losses and shocks in the capital markets.

The official inflation forecast of 3% in our opinion is undervalued. Given this situation, if China will not dramatically change the current fiscal policy (quite "hard" and "non-market" already), the real inflation rate will continue to grow and may in the medium term achieve the level of more than 10%. Active stimulation of domestic demand has its pitfalls.

Domestic strategic distortions are growing in Chinese economy and although the Chinese demand for commodities, as well as active investment policy of the Chinese government now holds the entire global economy, the fact that they no longer have the opportunity to invest in dollar assets - is a sign that China cannot endlessly keep the world on its shoulders.

In addition, there is a high risk of deterioration in the trade balance of China in mid- and long-term. Stimulating domestic demand, rise of living standards, increase of social spending (there are still no common retiring pension in China) may lead to sharp increase in government spending and therefore in imports, which can also adversely affect the future budgets of the country.

Chinese government is the largest holder of the U.S. and European government bonds. In case of default in these economies, China is going to lose a lot.

Overheating economy in China, which consumes almost on top at the U.S. led to a strong tightening of monetary policy in the country and the so-called practice of "hard landing" - artificial measures inhibiting the Chinese economy growth. Yuan gradually growing stronger, despite the best efforts of the Chinese government to keep this process under control. What new measures might take China's People's Party to curb the growth of the national currency - is unknown. Nevertheless this is a risk factor for China's trading partners



as well. If in order to avoid further price increase the People's Bank of China will continue to increase the reserve requirements and raising rates, Chinese economy growth will decrease, reducing the demand for commodities. This will have an even greater pressure on prices for oil and metals, which again will affect the world economy as a whole.

## **Japan debt burden**

Japan is one of major economical Asian centers. It is not the first year the Japanese economy suffering from the effects of "economic boom" that resulted in a "bubble". The main consequence is the level of public debt of 220% to GDP (11 trillion U.S. Dollars) – largest among all developed economies.

The volume of debt securities market of Japan is second after the United States. Ministry of Finance of Japan expects growth of public debt to a record of \$ 997.71 trillion yen (12.167 trillion. U.S. dollars) in autumn 2012 – it will account for nearly 8 million yen or about \$ 95k per capita.

The beginning of this crisis is in early 1990s. The Government was trying to stimulate domestic demand and investment, increasing the budget expenditures (34.6% increase in 1984-1990) and reducing the interest rate to zero.

Initially this kind of policy was a success – GDP grew during the 1984-1991 by 51.8% (at current prices). For Japan, it was a golden age. For example, the U.S. imports for 1985-1990 increased by 46.7%, Japanese imports increased by 80.4%.

This marked the beginning of so-called "Bubble economy". Raising interest rates in the Japanese Central Bank in 1990 gave the first impetus to the collapse. Inflated prices for land and stocks fell for a short time, lowering the value of collateral bank loans. The economy began to accumulate, "bad debts", the banks began to reduce lending, exacerbating the decline. There was a vicious circle: a bad conjuncture - squeezing out loans - even worse conjuncture.

By this time the international activities of Japanese banks began to represent a threat to the western financial system. Using low interest rate in the country, Japanese commercial banks were providing cheap loans abroad. The volume of loans amounted to one third of total world output. In 1992 representatives of the Western central banks have adopted a new rate of lending, which led to the need to reduce the amount of assets of Japanese banks.

The size of the disaster was enormous. The cumulative loss in value of the shares was 5 trillion U.S. dollars, and another 5 trillion was lost in the value of the land. This amount was comparable to the size of two years Japanese GNP, although the living standard of most Japanese was hardly affected. They lost profits from the "bubble" only.

As a result to stimulate the domestic demand and to support national banking system the Japanese government launched a program of mass domestic borrowings. In 1999-2003 the relative level of consolidated budget deficit reached 6-7.5% of GDP, ranking Japan the first among developed countries by this parameter.

In an effort to stimulate demand, the Bank of Japan reduced short-term interest rates on its loans a number of times and since 1999 the main landmark - the refinancing rate of the Bank of Japan - officially has repeatedly established at zero. Till 2012 this rate never exceeded 0.3%, and in general over the years, the central bank conducted a de facto policy of zero



interest rates. All other short-term interest rates on money market instruments are also sold with virtually zero returns. Yields on long-term bonds fell in the same period, down to 0.7-1.6%.

With each passing year it becomes increasingly difficult to refinance the debt - domestic resources are not enough, and the country is increasingly turning to borrowing in foreign markets. On the other side, as well as in other developed countries, economic growth in Japan is extremely low and highly unstable.

Country's financial situation deteriorated further in the spring of 2011 - March 11 devastating earthquake and subsequent tsunami not only undermined the already volatile GDP growth, but also caused great damage to the economy, according to preliminary data, amounting to about \$ 160Bn. The government has to borrow again which is to increase even greater. And according to experts and governors there is no visibility how to reduce the country's debt burden.

Taking into account difficulties of the Japanese government in the sale of its debt securities (investors are reluctant to invest in the bonds of a country with a record debt ratio to GDP), decreasing ratings and the increasing cost of servicing the debt, the probability of default of one of the largest economies in the world is increasing, although still remains low. First, the Land of the Rising Sun has large reserves, and secondly, it can always devalue the yen, which, incidentally, is one of the most likely scenario, since Japanese manufacturers, exporters are waiting impatiently for this event. The Japanese economy needs a cheap yen and if for the people it may affect the living standards, for Japanese export-oriented companies it will be a salvation.

A risk for Japan is a possible increase in government bond yields, which can make the unbearable burden of debt. Another problem is demographic - every year it becomes more and more costly to provide all social payments.

A distinctive feature of the Japanese system of debt associated with those who are investing in government securities. In Japan, more than half of all outstanding obligations of the state is in state institutions - government agencies and the central bank. At the same time, the share of foreigners in the market of public debt is several times lower than in other countries. This reduces market liquidity.

However, it should be clear that it is impossible to normalize debt situation in Japan without any external influence. Nevertheless the country still retains the mentality of people - unlike the Americans, they do not live on credit, but rather "salting away" - accumulation of households is estimated at \$ 9 trillion, which is a buffer on the path to default. Another factor is the internal nature of debt distributed to the public agencies and corporations. Summing up we can say that in case the current fiscal policy in Japan won't change dramatically - it will be a time bomb. In this crisis, however, the country is unlikely to make its "valuable" contribution.



## **Debt burden of India and ASEAN**

In general, South-East Asia holds a balanced budget policy and the level of public debt of most countries of SAARC and ASEAN kept within 50-60%. In many ways, this figure is achieved by a flexible fiscal policy.

The example of India - one of the promising BRIC countries. If you look closely at the graph of public debt to GDP ratio and the amount of debt we will not see any jumps and significant shifts in the crisis period 2008-2009. It looks like that the Indian economy, significantly integrated into the global economy and having a strong dependence on the consumption in developed countries, was not affected by the crisis at all.

However, if we turn our attention to the graph of cross-rupee exchange rate against the U.S. dollar, we see that the national currency of India dipped significantly in relation to all the world's reserve currencies. In fact, the Indian government has graded the impact of the crisis by reducing the value of the rupee. Living standards in India and in most countries of Southeast Asia is still quite low. Lack of social guarantees from the government, and dependency on food imports and other essential commodities allow the government to "play" with the national currency rate is much broader than in the case of "solid" currencies.

Of course, such a policy has its drawbacks, such as the reduction of investment attractiveness and risks of social unrest on the part of the country's emerging middle class. But for now, we can say, India has the privilege and effectively uses it.

## **Debt burden of Brazil and MERCOSUR**

Historically, the stability of the Brazilian economy stemmed from the commodity sector, which gave a positive trade balance. Thanks to a reasonable and restrained fiscal policy, the country managed to increase foreign exchange reserves, reduce public debt and as a result to make significantly lower real interest rates in the Brazilian banking.

The floating exchange rate, medium inflation rate and the strict fiscal policy are the three main components of the economic program in Brazil. Increasing productivity and high commodity prices contributed to the growth of Brazilian exports. Moreover, Brazil has repeatedly made various measures to reduce the debt burden. For example, the country has reduced its debt burden in 2006 by shifting its external debt in to the internal one.

Debt to GDP ratio decreased in 2002-2008 from 79.8% to 63.6%. However, the crisis has hurt Brazil export-oriented economy strong enough so the country was forced to enter the borrowing market increase its public debt. However, since 2010 the country continued the same course as before: total increase in public debt, reducing its ratio to GDP, clearly controlling the amount of borrowing and never exceeding the rate of economic growth. Brazil - one of the few countries that is really disciple in terms of budgeting and is going in line with its economic program.

Real exchange rate flexibility plays a significant role in the Brazilian economy. The situation is not as straightforward as, for example, the Indian rupee though. There is a negative effect because of currency volatility, and, until recently, its highest rate against the U.S. dollar and Euro. No measures of the Government – buy-out of the U.S. dollar by Central Bank of Brazil in the spot market, or increase the tax on foreign investment in the stock



market has not been successful. The high rate of real has a negative impact on Brazilian exports, in particular, the export of raw materials and agricultural products.

Other Latin American countries follow less restrictive fiscal policy, however, bringing the level of their debt to critical - the vast majority of the countries hold the debt to GDP ratio at a level not exceeding 50%.

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## Geografski raspored javnog duga

**REZIME** – Ovaj članak pruža makroekonomsku analizu javnog duga u glavnim ekonomskim regijama; svaka regija se razmatra sa aspekta javnog duga u odnosu na ključne makroekonomske pokazatelje, opisujući trenutno stanje javnog duga i izgled fiskalne politike u odabranim regijama.

**KLJUČNE REČI:** upravljanje javnim dugom, stopa razmene, zaduženost, spoljni i unutrašnji javni dug, ukupni dug, održivost javnog duga

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